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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/498,801	01/31/2000	Gary T. Boyd	55241USA9A	9317
32692	7590	12/02/2003	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427			SHAHER, RICKY D	
			ART UNIT	PAPER NUMBER
			2872	

DATE MAILED: 12/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/498,801

Applicant(s)

BOYD ET AL.

Examiner

Ricky D. Shafer

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) 10,11 and 17-38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 12-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 2872

1. A request for continued examination under 37 CFR 1.114 was filed in this application after appeal to the Board of Patent Appeals and Interferences, but prior to a decision on the appeal. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 29 September 2003 has been entered.

2. Applicant's arguments filed 29 September 2003 have been fully considered but they are not persuasive.

Applicant argues that the references to Schehrer et al ('508) and Uchiyama et al ('032) each fail to teach the first light source and the reflective image display unit being both mounted to the same mount surface of the mount.

The examiner disagrees and states that applicant's broad recitation of the language "mounted to a mount surface of a mount", as recited in claim 1, does not preclude the first light source and the reflective image display unit being first mounted in or via the head mounted display (1), as depicted in Fig. 1A of Schehrer et al, and then said head mounted display being disposed on the mount surface of mounting hardware (2) or the first light source and the reflective image display unit being first mounted in or via a case (1), as depicted in figures 2 and 16 of Uchiyama et al, and then said case being disposed on the mount surface of mount (10). See Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 218 USPQ 781 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984).

Art Unit: 2872

Moreover, applicant's use of the transitional phase "comprising" does not exclude the presence of additional, unrecited elements or function, such as in the present case of Schehrer et al with "an additional mount (534) for holding and/or securing the first light source, the reflective display unit and the reflective polarizing element" of figures 10a to 10d or in the present case of Uchiyama et al with "an additional case (1) for holding and/or securing the first light source, the reflective display unit and the reflective polarizing element". See Moleculon Research Corp v. CBS, Inc., 793 F.2d 1261, 229 USPQ 805 (Fed. Cir. 1986); In re Baxter, 656 F.2d 679, 686, 210 USPQ 795, 803 (CCPA 1981); and Ex parte Davis, 80 USPQ 448, 450 (Bd. App. 1948).

With respect to claims 2-9 being rejected under 35 U.S.C. 103(a) as being unpatentable over Uchiyama et al ('032) and claims 2-9 and 13-16 being rejected under 35 U.S.C. 103(a) as being unpatentable over Schehrer et al ('508), since applicant has failed to provide any argument and/or evidence as to why it would not have been obvious to modify the polarizing beam splitter of Uchiyama et al or Schehrer et al to include a curve reflective polarizer (polarizing film) as is commonly used and employed in the optical art in order to increase light concentration, provide uniform light transmission or alternatively reduce optical aberrations, bulk and weight of the display system, (i.e., Handschy et al ('800)), the examiner considers that the applicant has acquiesced such features as being obvious over Uchiyama et al or Schehrer et al.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2872

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Uchiyama et al ('032).

Uchiyama et al discloses an illuminated display device comprising a case (1) including a first light source (2) for directing light along a first axis, a reflective image display unit [(6B) or (6R)] having an optical axis substantially parallel to the first axis and a reflective polarizing film (4) disposed to direct light from the first light source to the reflective image display unit, note figures 2 and 16, wherein the case is mounted to a mounting surface of a mount (10). Thus, the first light source and the reflective image display unit are considered mounted to the mount surface.

Art Unit: 2872

5. Claims 1 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Schehrer et al ('508).

Schehrer et al discloses an illuminated display device comprising a head mounted display (1) including a first light source [(501), (510) or (533)] for directing light along a first axis, a reflective image display (504) having an optical axis substantially parallel to the first axis, a reflective polarizing film (505) and a reflector [(502), (512) (532)], note figures 1A, 7, 8 and 10a to 10d, wherein the head mounted display is mounted to a mounting surface of a mount (2).

Thus, the first light source and the reflective image display unit are considered mounted to the mount surface.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchiyama et al ('032).

Uchiyama et al discloses all of the subject matter claimed, note the above explanation, except for the reflective polarizing film being curved.

Art Unit: 2872

It is well known to provide a curved reflective polarizer in the same field of endeavor or analogous art for the purpose of reducing the bulk and weight of a display system or alternating provide for light concentration, uniform light transmission and/or aberration corrections.

Therefore, it would have been obvious and/or within the level of one of ordinary skilled in the art at the time the invention was made to modify the polarizing beam splitter of Uchiyama et al to include a curved reflective polarizer as is common used and employed in the optical art in order to increase light concentration, provide uniform light transmission or alternatively reduce optical aberrations, bulk and weight of the display system.

8. Claims 2-9 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schehrer et al ('508).

Schehrer et al discloses all of the subject matter claimed, note the above explanation, except for the reflective polarizing film being curved.

It is well known to provide a curved reflective polarizer in the same field of endeavor or analogous art for the purpose of reducing the bulk and weight of a display system or alternating provide for light concentration, uniform light transmission and/or aberration corrections.

Therefore, it would have been obvious and/or within the level of one of ordinary skilled in the art at the time the invention was made to modify the polarizing beam splitter of Schehrer et al to include a curved reflective polarizer as is common used and employed in the optical art in order to increase light concentration, provide uniform light transmission or alternatively reduce optical aberrations, bulk and weight of the display system.

Art Unit: 2872

9. This is a continued examination (RCE) of applicant's earlier Application No. 09/498,801. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

10. Any inquiry concerning this communication should be directed to R. D. Shafer at telephone number (703) 308-4813.

RDS

November 26, 2003

*R. D. Shafer*  
RICHARD D. SHAFER  
PATENT ATTORNEY  
2872